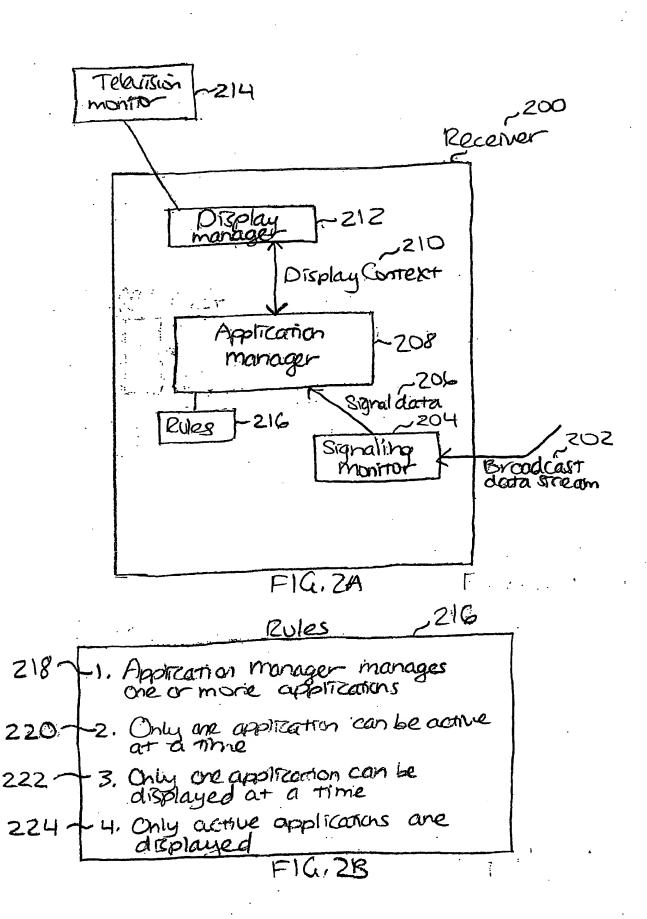


FIG.



TOPS :: 1

Signal Data ~302

App-present-in-data-stream; BULEAN -304 Locerius (e.g., directory, filename) ~306 Authentication ~308 Permissions ~310

FIG. 3

Application

Application

Application

Application context

Application

Application Context A-404

Class loader identifier	406	
Signal data identifier	408	. ;
Display context identifier	410	
Application Identifier	412	
Application environment Object	+ 414	C
Current application state	416	

FIG. 4B

TOPE &

Display List of display Context visible ContextZ 102 Contex+3 103 Context 4 504 invisible FIG. 5A FIG. 5B Paused Application State 516 ~ ACTIVE

D'isplay store

Visible

FIG, 5C

Invisible

TOPS :

514

The state of the s

602 Application loaded Application manager calls 606 Application constants Application active 604 Application Application poused Application manager or application sales rough 603 Application manager Application marager or application Application application calls 0115Cdestrou destroyed Charroy Idestroyed)

Application manager

FIG. G

Application Programming Interface (APS)

Interface application of 706

The public void init application (Application environment env)

708 — public void start application ()

710 — public void pause application (budean unconditional);

712 — public void destroy application (budean unconditional);

F1G, 7

Applicationenummarimerface

Interface Apolication-environment {

804 ~ public world desinged();

808 ~ public java.lang.obje + genproserry (stringla)

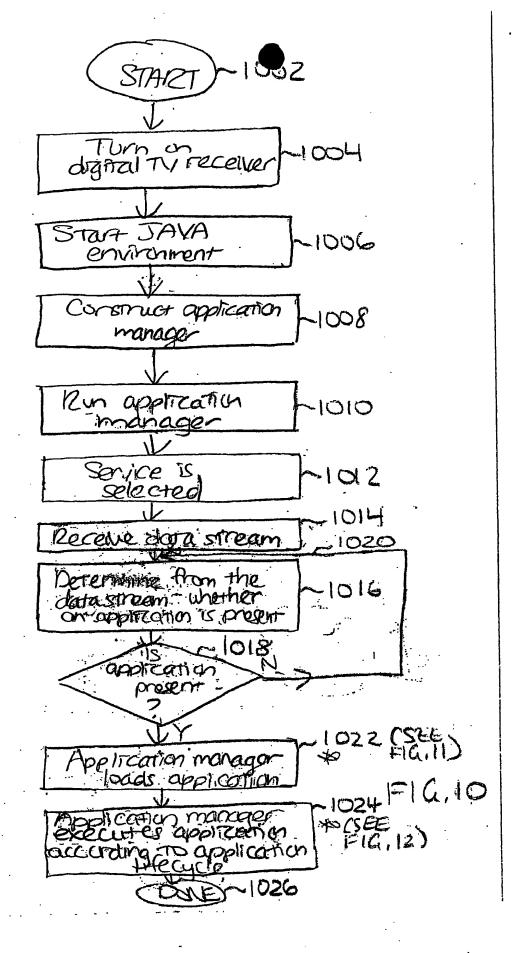
806 ~ public void paused();

812 ~ public void resumer equest();

FIQ. 8

Application -902 Manager	Application
Call into application	208 208 208
Call destroy applican	on() ->~910
Call Pause application	n() >~912
914 ~ < Applic	cation-environmentapptican infaused()
916~ < Applic	conicin_environment application destroyed()
918~ Appli	conion-environmentiresume request () -
920 ~ Appl	ication—environment. getprocery()
<i>•</i>	• •

FIG. 9



TOPS 75' 35500' (*

@1022 olication, er loods -1102 application Recove Signal dora 1106 Application manager creates class logider for the application -1108 Classes are laded ura the class lander -1110 Characte instance of explication = PARTIES CATES -1114 and its walker datentheancider -1116 TO MERCANDE remonvendronmen -1118 rittalize the

FIQ, IT

TOPS

C 1024 Application manager executes 1202 Application waits to 1204 J206 Application manager (SEE FIG.13) changes the application STATE TO Palife _1208 ** proportion manager charges the applications state to active 1210 1212 Application or application manager application manage application state COOT ON STATE no sausec 1214 lys bader unbads closes -1216 Application released

F16,12

TOPS

Application manager
calls intrapplication
and passes it the application environment object

Application uses the application environment object to initialize 7?

The Passed State 1308

FIG, 13

MORE A

C1208 1402 New program begins or user presses abution on the television's remove. -1404 re application manager plication for the application tower carried starts) Application manager Strict application 1406 method for the application Application performs service and enters 1408 Active state

FIGILY

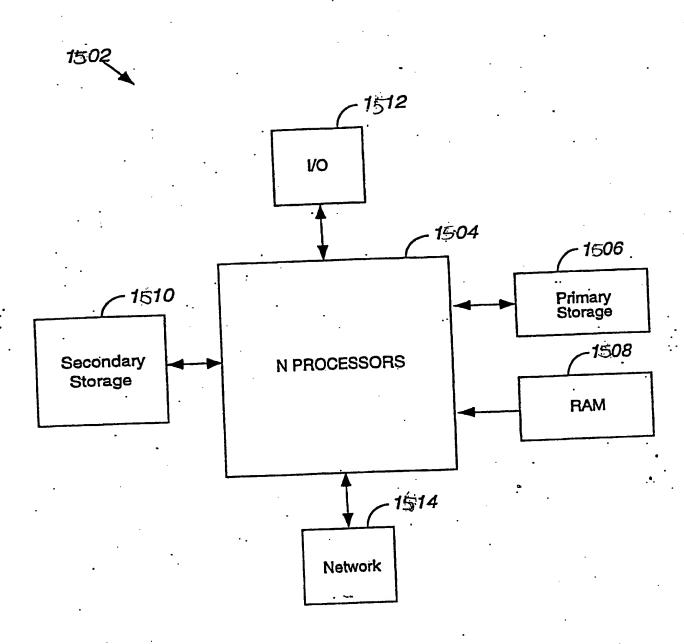


Figure 15.